

Attorney Docket No. 110963 004 US
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF APPEALS AND INTERFERENCES

APPLICANT : Peter Marten Van Der Horst
SERIAL NO. : 10/584,005 Appeal No. _____
CUSTOMER NO. : 27384
CONFIRMATION NO. : 8565
FILED : August 15, 2006
FOR : PAPER COMPRISING QUATERNARY NITROGEN
CONTAINING CELLULOSE ETHER
ART UNIT : 1741
EXAMINER : Dennis R. Cordray

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SIR:

APPELLANT'S REPLY BRIEF TO EXAMINER'S ANSWER
PURSUANT TO 37 C.F.R. § 41.41.

Dear Sir:

Pursuant to 37 C.F.R. § 41.41, the Applicant submits this Reply Brief to the
Examiner's Answer mailed June 16, 2011.

In the event a fee is required or if any additional fee during the prosecution of this application is not paid, the Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 14-1263.

ARGUMENT

The rejection of claims 1, 2, and 14 under 35 U.S.C. § 103(a) as being unpatentable over Matsuda, et al. in view of Hosokawa, et al., as evidenced by Watanabe, et al..

The Examiner states that Matsuda discloses an ink jet recording medium comprising a paper substrate having a basis weight from 50 to 100 g/m² and containing from 5 to 30 percent by weight of a filler and retention aids. See Examiner's Answer, page 5. The examiner points to Matsuda, column 4, lines 25-27 for the teaching of retention aids. The examiner then points to Hosokawa for the teaching of cationized CMC and alleges that "[a]bsent convincing evidence commensurate in scope with the claims, it would have been obvious to one of ordinary skill in the art to use the claimed cellulose ether as a retention aid in the paper of Matsuda et al in view of Hosokawa et al as a functionally equivalent option and to have a reasonable expectation of success." Contrary to assertions of the Examiner, the Applicant need not provide such evidence because the Examiner has not established a *prima facie* case of obviousness for at least the following reasons.

First, the portion of Matsuda pointed to by the Examiner merely broadly states that "[r]etention agents and stiffness agents can be added to the substrate as required" Aside from this general disclosure, Matsuda does not provide any teaching or examples specifying which retention agent(s) may be used and/or their amount to be

used. Thus, there is no guidance in Matsuda that would have led one of ordinary skill in the art to have selected the cationized CMC of Hosokawa from the plethora of retention agents available in the papermaking field, and use it in combination with the teaching of Matsuda. In addition, the Examiner has provided no reasoning why one of ordinary skill in the art would have picked the CMC of Hosokawa from among the retention agents available and use it in combination with the teaching of Matsuda. But for impermissible hindsight, one of ordinary skill in the art looking at Matsuda (with its one-sentence general teaching of retention agents) would not have had any reason to turn to Hosokawa in the first place, much less have readily selected the specific cationized CMC of Hosokawa and use it in combination with the teaching of Matsuda. "It is not proper to dissect claims and reconstruct them in piecemeal fashion by picking and choosing from among the prior art references using the patent as a blueprint." *In re Kamm*, 452 F.2d 1052, 1056-57, 172 USPQ 298, 301-02 (CCPA 1972). Indeed, without Applicant's disclosure as a blueprint, one of ordinary skill in the art could just as readily have turned to Agnemo for its teaching of specific types of retention aids, but none of which include cellulose ethers.

In addition to the lack of guidance to turn to Hosokawa in the first place, Applicant further submits that even if one of ordinary skill in the art would have turned to Hosokawa, the Examiner has not explained why one of ordinary skill in the art would have selected any one cationically modified cellulose ether over any others that Hosokawa discloses. That is, claim 1 includes a cellulose ether having a certain DS of quaternary ammonium groups, a certain DS of carboxymethyl groups and a certain net charge. The Examiner has provided no basis for why one of ordinary skill in the art

would have chosen a specific cellulose ether that allegedly reads on the claimed cellulose ether from among the numerous other embodiments of Hosokawa that do not. Again, Applicant submits that only through impermissible hindsight using Applicant's application as a blueprint is the Examiner able to do so.

Accordingly, the combination of Matsuda and Hosokawa is improper because the Examiner relies on information gleaned solely from the instant specification. "Impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art." MPEP § 2142 (emphasis added). "Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper" MPEP § 2145(X)(A), quoting *In re McLaughlin*, 443 F.2d 1392, 1395 (CCPA 1971) (emphasis added). Here, it is apparent that the Examiner's reasoning ignores the two-part requirement, relying only on the assertion that "[t]he disclosure of Hosokawa et al was knowledge that was within the level of ordinary skill at the time of the claimed invention" (see Examiner's Answer, page 11). This the Examiner cannot do and it is why the Examiner has failed to make a *prima facie* case of obviousness.

Second, as noted above, the Examiner merely states that "[a]bsent convincing evidence commensurate in scope with the claims, it would have been obvious to one of ordinary skill in the art to use the claimed cellulose ether as a retention aid in the paper of Matsuda et al in view of Hosokawa et al as a functionally equivalent option and to

have a reasonable expectation of success.” Such statement is a mere conclusory statement and nowhere in the Office Action or Examiner’s Answer did the Examiner provide any objective reason why one or ordinary skill in the art would have picked the cationized CMC and use it in combination with Matsuda. “A statement that modifications of the prior art to meet the claimed invention would have been ‘well within the ordinary skill of the art at the time the claimed invention was made’ because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references.” MPEP 2143.01(IV) (emphasis added). Furthermore, “rejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Id.*

Because the Examiner has not provided any reason as to why one skilled in the art looking at Matsuda would have selected the cationized CMC of Hosokawa, the Examiner has not established a *prima facie* case of obviousness and therefore the claim rejection should be withdrawn.

The rejection of Claims 12, 13, and 15 under 35 U.S.C. § 103(a) as being unpatentable over Matsuda, et al. in view of Hosokawa, et al. and further in view of Ferguson, et al.

The Examiner has failed to make a *prima facie* argument for the reasons provided above. In addition, the Examiner’s statement at page 12 of the Examiner’s Answer fails to respond to Applicant’s argument that Ferguson teaches away from the claimed invention. The Examiner states, “Appellant argues that Ferguson et al should

be used in its entirety and that the reference exemplifies only hydroxyethyl cellulose (HEC). The HEC of Ferguson et al was used to form the vesiculated polymer granules which were incorporated into paper to provide opacity. Ferguson et al does not discuss CMC at all thus cannot teach for or use against its usage." It is unclear what the examiner meant by these statements. As previously presented in the Appeal Brief, Ferguson exemplifies (in all of its examples) only one non-ionic cellulose derivative, i.e. hydroxyethyl cellulose (HEC). It is noted that HEC, via the proviso, is specifically excluded from our claimed invention because the use of HEC causes the formation of cellulose agglomerates originating from the pulp, which in turn leads to visibly inhomogeneous paper. In addition, HEC causes the paper to have a higher dewatering time, which is detrimental to the productivity of the paper making process. See Specification, page 4, lines 4-14. Considering that Ferguson only exemplifies HEC and the Federal Circuit's mandate that "[a] prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention" (MPEP § 2141.02(VI) quoting *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984)), one of ordinary skill in the art looking at Ferguson would not ignore the teachings of Ferguson regarding HEC. Yet, the Examiner does just that or else he could not make the rejection.

In fact, such person skilled in the art would instead be led to use HEC. One of ordinary skill in the art having the disclosure of Ferguson would not specifically exclude the use of HEC because HEC is specifically taught as the only cellulose ether of choice in Ferguson. In contrast, the present claims specifically exclude HEC; therefore, it

cannot be said that such teaching can be ignored where Ferguson clearly teaches away from the present claims. That CMC is not disclosed is of no consequence, as the claimed invention does not require conventional, non-substituted CMC, but instead requires the specified cellulose ether. The rejection should be withdrawn

The rejection of Claims 1, 2, 5, 8, 9 and 14 under 35 U.S.C. § 103(a) as being unpatentable over Agnemo in view of Hosokawa, et al. and as evidenced by Smook.

The obviousness rejection based on Agnemo is in error for the similar reasons to the rejection based on Matsuda and Hosokawa. Agnemo, on column 3, lines 37-41, provides examples of a retention agent and states, "[t]he paper will normally also include a retention agent, for example of the kind polyacrylamide, polyethylene imine or a multicomponent system consisting, for instance, of polyethylene oxide and phenol resin." Similar to Matsuda, Agnemo fails to provide any guidance that would lead one skilled in the art to select a specific cationized CMC from Hosokawa from among a plethora of retention agents available in the papermaking field, and then use it in combination with the teaching of Agnemo.

For the similar reasons provided above in connection with the rejection based on Matsuda and Hosokawa, the Examiner has not established a *prima facie* case of

obviousness. Therefore the claim rejection based on Agnemo and Hosokawa should be withdrawn.

Respectfully submitted,
NORRIS MC LAUGHLIN & MARCUS, P.A.

By _____

Christopher S. Casieri
Attorney for Applicant
Reg. No. 50,919
721 Route 202 – 206
Suite 200
P.O. Box 5933
Bridgewater, NJ 08807-5933
Phone: (908) 722-0700
Fax: (908) 722-0755

August 9, 2011